REMARKS

Claims 1, 3-9, and 11-18 are pending in the application.

Dependent claims 3-8, 11-16, and 18 are currently amended to merely delete the phrase, "all the limitations of which are incorporated herein by reference", which had been added in anticipation of a rule change to Rule 75(b) by the Office that was enjoyned by the Federal Circuit. Applicants respectfully submit that no new matter is added to currently amended claims 3-8, 11-16, and 18.

Applicant respectfully submits that entry of the currently amended claims is proper because the currently amended claims will either place the application in condition for allowance or in better form for appeal.

Claims 1, 4, 6-7, 9, and 12-17 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,055,513 to Katz et al., hereinafter, Katz.

Claims 1, 3, 5, 8, 11, and 18 stand rejected under 35 U.S.C. §103(a) as unpatentable over Katz, and further in view of U.S. Patent No. 6,125,339 to Reiser et al., hereinafter, Reiser.

Applicants respectfully traverse the rejections based on the following discussion.

I. The 35 U.S.C. §112, Second Paragraph, Rejection

Claims 1, 3-9, and 11-18 stand rejected under 35 U.S.C. §112, second paragraph.

The Office Action states, "The independent claims mention customer activities across multiple channels upon which promotions are targeted and delivered, however, it is unclear how a one-way channel such as a catalog or direct marketing can be used in this way."

Applicants respectfully request the Examiner's to consider the following, which has its basis in the Background Section of the present application. (Page 1, lines 10-31).

A merchant may not only receive information (belief values) about customer activities(enquiries or purchases) through a specific channel, e.g., retail store vs. online shopping, but may also reach customers through channel-specific promotions. For example, with respect to the particular question posed by the Examiner, assume that a particular customer has made many purchases of a particular item at retail stores. The customer then places a purchase order (a

request) for the particular item through a catalog (either an online catalog or a "paper" catalog requiring either a phone or mail transaction). The merchant, who we may assume wishes to reduce retail transaction costs, may then choose to offer to this particular customer, making his/her initial catalog purchase, an immediate discount for an online catalog purchase, or an immediate discount for a telephone catalog purchase, or a future rebate to a mail-order catalog purchase.

In contrast to the misunderstanding of, for example, a catalog, as a "one-way" channel, a catalog is a means by which a particular customer may interact with the merchant, both by presenting information to the customer and by providing information to the merchant based on the customer's interaction with the catalog.

For at least the reasons outlined above, Applicants respectfully submit that claims 1, 3-9, and 11-18 particularly point out and distinctly claim the subject matter which Applicants regard as the invention, and thus, satisfy the statutory requirements of 35 U.S.C. §112, second paragraph. Withdrawal of the rejection of claims 1, 3-9, and 11-18 under 35 U.S.C. §112, second paragraph, is respectfully solicited.

II.   The Prior Art Rejections
A.   The 35 U.S.C. 102(b) Rejection over Katz
1.   The Katz Disclosure

Katz discloses a method that provides offers of an item constituting a good or a service in the form of an offer for purchase of the item to potential customers as users of the system, utilizing an electronic communications device, such as a telephone, videophone or computer, comprising the steps of, first, establishing communication via the electronic communications device between the user and the system for purposes of a primary transaction, second, obtaining primary transaction data with respect to the transaction, including determining the identity of the prospective customer, third, obtaining at least a second data element relating to the user for the upsell determination, fourth, utilizing at least in part the primary transaction data and the second data element and determining at least one good or service item for prospective upsell to the prospective customer, and fifth, offering the item to the prospective customer. (col. 8, lines 45-

62, which are cited by the Office Action).

Katz also discloses that primary transaction data may include data relating to or reflecting the initial or primary contact from the customer to the system. In operation, one or more databases may be accessed, either in parallel or in series, to collect and assemble input information fro the system to determine the upsell or intelligent product selection. Alternatively, nonautomatic entry may be utilized, such as where the customer or operator effects data entry. (col. 8, line 67 to col. 9, line 5 and col. 9, lines 41 and 42, which are cited by the Office Action).

Katz further discloses that the system for identifying the potential proffer utilizes the input information so as to generate one or more outputs comprising potential proffers to the user. Various selection methodologies are available, including historical selection criteria keying the proffer to what has effectively resulted in sales or successful transactions in the past, or proffers based upon demographic profile or other inputs as a designator for a potential upsell. In yet other selection methodologies, theme sales may be utilized such as where further goods are required to complete a set, such as a formal ware set. (col. 10, lines 46-55, which are cited by the Office Action).

2. Arguments

Previously presented, independent claims 1 and 17 recite in relevant part,

"storing belief values and an integrated belief profile of a customer,

wherein said belief values are based on activities of said customer across said multiple channels, and

wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value;

…

updating said integrated belief profile, based on said stored belief values of said customer;

…

… generating a channel-specific promotion based on said updated integrated belief profile".

Similarly, previously presented claim 9 recites in relevant part,

"a storage device for storing belief values and an integrated belief profile of a customer,

wherein said belief values are based on activities of said customer across said multiple channels, and

wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value;

…

a processor adapted to:

…

update said integrated belief profile, based on said stored belief values of said customer;

…

generate a channel-specific promotion based on said updated integrated belief profile".

The present invention describes a method and system to generate a promotion (or offer) that a customer may find useful on a retail channel. For this purpose, the invention describes a method for generating and incrementally updating a customer profile for a channel. For each customer and for each channel through which the customer interacts with the merchant, a customer profile is generated based on the customer transactions on the channels. A customer thus has a channel specific profile for each channel. Moreover, the customer profile is statistically calculated and stores information that captures customer's behavior, i.e., activities, that the customer exhibits via the channel. In that sense, it is a behavioral customer profile rather than the usual demographic customer profile used by Katz.

On the other hand, Katz describes a <u>customer profile as containing only factual</u> <u>information about customer</u>, like customer's demographic information (age, sex, income, occupation, education level, interests, and credit data), credit data, and transaction data. Katz teaches that this data is spread over multiple sources. The spread of customer data over multiple databases is a common occurrence in any large computer system and <u>accessing data scattered</u> <u>across multiple databases should not be considered as analogous to the multiple channels of the</u> <u>present invention</u>. The profile attributes associated with a belief value, based on activities of the customer, are much easier to obtain directly from the customer. Whereas, the behavioral profile is generated from the customer transactions. The transaction data (even of a single channel) may be spread over multiple databases and all of those are accessed for calculation.

Additionally, the <u>behavioral customer profile of the present invention contains numeric</u> <u>values indicative of customer's interaction pattern on the channel</u>. The present invention also provides a method, i.e., a Dempster Shafer's belief function, to incrementally update the customer profile on the channel. This incremental update is required to capture customer behavior exhibited by new transactions carried out by the customer on a channel.

Furthermore, the customer exhibits different behavior on different retail channels. Thus, <u>the invention provides a method to create a profile, i.e., an integrated profile, by fusing customer</u> <u>profiles of the customer on all different channels.</u> This fusion strengthens the belief in a customer's common behavior across channels and diminishes the differences in behavior across channels. Hence, the invention obtains an integrated profile of the customer that truly represents that customer's behavior across channels.

Please note that while the presnt inventions fuses customer profiles from multiple channels, the present invention still retains the channel-specific customer profiles.

The invention then proceeds to generate an offer (or promotion) using pre-defined rules that take (1) the integrated customer profile and (2) the channel profile of the customer, as input. As both, (1) the integrated customer profile and (2) the channel specific profile of the customer,

are used to generate the promotion for the customer on the given channel, the customer gets a promotion that truly is useful for customer generally and on the channel specifically.

The present invention uses Dempster belief theory for (1) integrating various channel profiles and (2) to incrementally update the channel profile. These two profiles are then inputted to generate the promotion offered on a specific channel.

For at least the reasons outlined above, Applicants respectfully submit that Katz does not disclose, teach or suggest at least the present invention's features of: "storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; … updating said integrated belief profile, based on said stored belief values of said customer; … generating a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claims 1 and 17; and "a storage device for storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; … a processor adapted to: … update said integrated belief profile, based on said stored belief values of said customer; … generate a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claim 9. Accordingly, Katz fails to render obvious the subject matter of previously presented, independent claims 1, 9, and 17, and dependent claims , 3-8, and 11-16, and 18 under 35 U.S.C. §102(b). Withdrawal of the rejection of claims 1, 3-8, and 11-18 under 35 U.S.C. §102(b) as anticipated by Katz is respectfully solicited.

B.   The 35 U.S.C. 103(a) Rejection over Katz and Reiser

1.   The Reiser Disclosure

Reiser discloses a method of automatically learning belief functions, thus providing the

ability to determine erroneous information sources, inappropriate information combinations, and optimal information granularities, along with enhances system performance. Reiser's invention may be embodied in a method of training belief functions, including the steps of gathering information representative of an object or event; creating a set of basic probability assignments based on said set of information; creating combinations of said basic probability assignments; measuring an error present in said basic probability assignments and said combinations of said basic probability assignments based on said error; and modifying said basic probability assignments and said combinations of basic probability assignments with said updates. (col. 2, lines 6-23, which is cited by the Office Action).

2.   Arguments

Previously presented, independent claims 1 and 17 recite in relevant part,

"storing belief values and an integrated belief profile of a customer,

    wherein said belief values are based on activities of said customer across said multiple channels, and

    wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value;

    …

    updating said integrated belief profile, based on said stored belief values of said customer;

    …

    … generating a channel-specific promotion based on said updated integrated belief profile".

Similarly, previously presented claim 9 recites in relevant part,

"a storage device for storing belief values and an integrated belief profile of a customer,

    wherein said belief values are based on activities of said customer across said multiple channels, and

wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value;

...

a processor adapted to:

...

update said integrated belief profile, based on said stored belief values of said customer;

...

generate a channel-specific promotion based on said updated integrated belief profile".

Resier merely discloses that the ability to adjust belief functions used in a system would allow the system to "learn" from the information provided by information sources and the ability of the system to automatically update belief functions would allow the system to determine erroneous information sources, inappropriate information combinations, and optimal information granularities (col. 1, line 61 to col. 2, line 1).

Nowhere does Reiser disclose, teach or suggest at least the present invention's features of: "storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; ... updating said integrated belief profile, based on said stored belief values of said customer; ... generating a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claims 1 and 17; and "a storage device for storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; ... a processor adapted to: ...

update said integrated belief profile, based on said stored belief values of said customer; ... generate a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claim 9.

Instead, Reiser merely discloses that the ability to adjust belief functions used in a system would allow the system to "learn" from the information provided by information sources and the ability of the system to automatically update belief functions would allow the system to determine erroneous information sources, inappropriate information combinations, and optimal information granularities.

For at least the reasons outlined above with respect to the rejection of the claims over Katz, and for at least the reasons outlined immediately above with respect to the rejection of the claims over Reiser, Applicants respectfully submit that Katz and Reiser, either individually or in combination, do not disclose, teach or suggest the present invention's features of: "storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; ... updating said integrated belief profile, based on said stored belief values of said customer; ... generating a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claims 1 and 17; and "a storage device for storing belief values and an integrated belief profile of a customer, wherein said belief values are based on activities of said customer across said multiple channels, and wherein said integrated belief profile is derived from profile attributes for each of said multiple channels for said customer, each of said profile attributes being associated with a belief value; ... a processor adapted to: ... update said integrated belief profile, based on said stored belief values of said customer; ... generate a channel-specific promotion based on said updated integrated belief profile", as recited in previously presented, independent claim 9. Accordingly, Katz and Reiser, either individually or in combination, fail to render obvious the subject matter of previously presented, independent claims 1, 9, and 17, and dependent claims 3, 5, 8, 11, and 18 under 35 U.S.C. §103(a). Withdrawal of the rejection of claims 1, 3, 5, 8, 11, and 18 under 35 U.S.C. §103(a) as

unpatentable over Katz and Reiser is respectfully solicited.

III.   Formal Matters and Conclusion

Claims 1, 3-9, and 11-18 are pending in the application.

Applicants respectfully submit that the claims satisfy the statutory requirements of 35 U.S.C. §112, second paragraph.

With respect to the rejections of the claims over the prior art, Applicants respectfully submit that the claims are distinguishable over the cited prior art of record. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 1, 3-9, and 11-18, all the claims presently pending in the application, are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest time possible.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

Dated: September 9, 2008

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